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| 10/532,256   | 12/02/2005  | Benoit Regnard       | 17170/010001        | 8566             |
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| EXAMINER   |             |                      |                     |                  |
| LE, DANG D   |             |                      |                     |                  |
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| 2834   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/532,256

**Applicant(s)**

REGNARD ET AL.

**Examiner**

Dang D. Le

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 08 have been fully considered but they are not persuasive. The applicant's argument is on the ground that bolt 12 is not a phase connector. It is noted that "a phase connector" in claim 1 is not will defined and during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater , 162 USPQ 541, 550 - 51 (CCPA 1969). Bolt 12 in Nakamura et al. is electrically connected with minus plate 17 and frame 4. The bolt 12 is used to connect minus fin 17, plus fin 15, terminal plate 14, and bushing 16, which are components of the full wave three phase rectifier 10. Therefore, bolt 12 can be said "a phase connector". Similarly, Hayashi et al. also shows the terminal 54 as a phase connector for being connected to the positive heat sink of the three phase rectifier. Because Nakamura et al. and Hayashi et al. show the same well known structure of alternator for vehicle, it is not necessary to provide more thorough explanations unless it is needed for dependent claims 39-41. As a result, the rejection is still deemed proper and repeated hereinafter.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25-38, 44, 45, 47, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (6,034,452).

Regarding claim 25, Nakamura et al. shows a polyphase rotating electrical machine comprising:

- An outer frame (right side) comprising a rear bearing (4);
- A protective outer cover (11) configured to be mounted on the rear bearing;
- A polyphase wound stator (2, 21) comprising a plurality of phase outputs; and
- A phase connector (12, 16, 18) configured to connect to the plurality of phase outputs and configured to connect to an exterior electronic module (rectifier), wherein the phase connector and the protective outer cover are the same part (Figure 3), and
- wherein the protective outer cover (11) is a complementary cover to the rear bearing (4, Figure 2).

Regarding claim 26, Nakamura et al. also shows the cover comprising electrically insulating material (resin).

Regarding claim 27, Nakamura et al. also shows a polyphase rotating electrical machine comprising:

- an outer frame comprising a rear bearing (4);

- a protective outer cover (11) configured to be reciprocally mounted on the rear bearing;
- a polyphase wound stator (2, 21) comprising a plurality of phase outputs; and
- a phase connector (12, 16, 18) configured to connect to the plurality of phase outputs and configured to connect to an exterior electronic module (rectifier 10),
- wherein the phase connector is supported on a first projection (11a) extending from the protective outer cover, and
- wherein the protective outer cover is a complementary cover to the rear bearing (Figure 2).

Regarding claim 28, Nakamura et al. also shows the first projection being configured to be mounted on the rear bearing.

Regarding claim 29, Nakamura et al. also shows the first projection being arranged on an external peripheral portion of the cover (Figure 4B).

Regarding claim 30, Nakamura et al. also shows the phase connector being offset by the first projection to a location beyond the external peripheral portion of the cover (Figure 4B).

Regarding claim 31, Nakamura et al. also shows the first projection comprising support arms (Figure 4b and Figure 9) extending from the cover.

Regarding claim 32, Nakamura et al. also shows the cover comprising an external peripheral skirt (Figure 3) and a bottom, and the support arms being integrated with the external peripheral skirt of the cover and the bottom of the cover.

Regarding claim 33, Nakamura et al. also shows the support arms being connected by a flange that carries the phase connector (Figure 10B).

Regarding claim 34, Nakamura et al. also shows the phase connector having a rod (12) crossing the flange and the rod is integrated with a support tab attached to the rear bearing (Figure 2).

Regarding claim 35, Nakamura et al. also shows the support tab is supported on a chimney integrated with the rear bearing and is perforated for the passage of a mounting element in the chimney (Figure 2).

Regarding claim 36, Nakamura et al. also shows the phase connector comprising a hollow protuberance carried by the flange, the rod crosses the flange and the protuberance, and the support tab comprising a second projection mounted inside the protuberance (Figures 6B and 7).

Regarding claim 37, Nakamura et al. also shows the second projection being supported on a perforated part, which is perforated for passage of the rod, and the perforated part is made of thermoset plastic material resistant to creep attached by cast molding to the inside of the protuberance (Figures 6B and 7).

Regarding claim 38, Nakamura et al. also shows the rod being threaded (to 18).

Regarding claim 44, Nakamura et al. also shows a brush holder being covered by the cover and associated with a brush holder connector, and the brush holder connector is integrally formed with the cover (Figure 1).

Regarding claim 45, Nakamura et al. also shows the cover having a bottom, and the brush holder connector is connected to the brush holder by electrically conducting tracks sunk in the bottom of the cover (Figure 1, top right).

Regarding claim 47, Nakamura et al. also shows the cover comprising two parts, one part has the phase connector and the other part covers the brush holder (Figure 1, top right and bottom right).

Regarding claim 48, Nakamura et al. also shows the polyphase rotating electrical machine being an alternator.

4. Claims 25, 27, 28, 31, 33, 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al. (2001/0054853).

Regarding claims 25, 27, 28, 31, and 33, Hayashi et al. shows all of the limitations in Figures 1, 2, 4, 7, and 8.

Regarding claim 39, Hayashi et al. also shows the phase connector being connected to phase connection inputs by electrical conductors at least partially sunk in the first projection (Figure 2)

Regarding claim 40, Hayashi et al. also shows the electrical conductors comprising electrical tracks (52, 92), and at least two electrical tracks are installed, each electrical track connected to an electrical contact face of the phase connector (Figure 3).

Regarding claim 41, Hayashi et al. also shows the electrical tracks being sunk in the cover, in the support arms, and in the flange (Figure 2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Tsuchiya et al. (4841182).

Regarding claims 42 and 43, Hayashi et al. shows all of the limitations of the claimed invention including the phase connector being connected to phase connection inputs by electrical conductors at least partially sunk in the first projection, and the phase connection inputs extend to the external periphery of the cover except for being covered by a secondary cover mounted on the cover and made of electrically insulating material and the secondary cover being in the shape of a circle arc, the phase connection inputs comprise mounting tabs, and the secondary cover has hollow bosses configured to house the mounting tabs.



Tsuchiya et al. shows being covered by a secondary cover mounted on the cover and made of electrically insulating material and the secondary cover being in the shape of a circle arc, the phase connection inputs comprise mounting tabs, and the secondary cover has hollow bosses configured to house the mounting tabs (Figure 1, right side) for the purpose of protecting the phase connector.

Since Hayashi et al. and Tsuchiya et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a secondary cover as taught by Tsuchiya et al. for the purpose discussed above.

8. Claims 46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of Vlemmings et al. (6,424,065).

Regarding claims 46 and 49, Nakamura et al. shows all of the limitations of the claimed invention except for the polyphase rotating electrical machine being an alternator-starter further comprising: a sensor holder; and a sensor holder connector, wherein the sensor holder is mounted under the bottom of the cover, and the sensor holder connector passes radially through an opening in a peripheral annular wall of the cover.

Vlemmings et al. the polyphase rotating electrical machine being an alternator-starter further comprising: a sensor holder (8); and a sensor holder connector (62) for the purpose of monitoring the motor and starter operation.

Since Nakamura et al. and Vlemmings et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the polyphase rotating electrical machine as an alternator-starter and to include a sensor holder with a sensor holder connector, wherein the sensor holder is mounted under the bottom of the cover, and the sensor holder connector passes radially through an opening in a peripheral annular wall of the cover as taught by Vlemmings et al. for the purpose discussed above.

#### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### ***Information on How to Contact USPTO***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on (571) 272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dang D Le/  
Primary Examiner, Art Unit 2834

12/20/08